Equipment details

Bodies: Welded steel underframe riveted aluminium body frame and aluminium alloy

panelling. Exterior painted on refurbishment in LUL corporate red, white and blue

livery.

4-wheel symmetrical plate frame bogies of welded/riveted construction. Bogies:

Wheel diameter 790mm new, 710mm worn.

Couplers: London Underground Automatic Wedgelock between units, semi-permanent bar

between cars within a unit.

Traction system: G.E.C. Traction pneumatic single camshaft, resistance controller with series/

> parallel grouping and 2 stages of weak field and rheostatic dynamic brake. Brush LTI18 axle-hung, nose-suspended motors, 300 volt motors, 17/75 gear ratio, 4 per driving motor car, I per driving axle, the two motors on each bogie are

connected in permanent series.

Westinghouse 3HC43 (reciprocating) with integral 630V dc motor, I on each Compressors:

single-ended trailer, 2 on special trailers (double-ended units)

Brakes: Service brake: Motor cars – blended rheostatic/friction brake with load control.

Trailer cars – friction brake with load control.

Friction brake – one brake per wheel.

Emergency Brake: All cars – Friction brake.

Brake control: via energise to release Westcode 7-step valve.

Steps 3,4,5,6, for service, step 7 for emergency.

Service brake: Energise to apply 3-wire control system. Emergency: Energise to release electric control. Parking brake: Automatic spring-applied, air released.

Auxiliary power

G.E.C. Traction type MG3007 Motor- Alternator-Rectifier – one per motor car, supplies:

nominal 50V lead acid battery, 77Ah, Powernetics 6kVA single phase, 240V, 50Hz static converter to feed saloon fans and cab air conditioning – one per

trailer.

115V, 850Hz supply from the motor alternator supplying fluorescent tubes via Main lighting:

individual inverters – 20 tubes per driving motor car and 22 tubes per

trailer/UNDM car.

Emergency lighting: Four battery-fed fluorescent tubes per car supplied by individual inverters and

normally forming part of the main saloon lighting.

Heating: Panel heaters, 4.2kW per car.

Ventilation: Seven extractor fans per car, two of which are inverter-fed from the battery.

Manually operated ventilators over saloon side windows.

Passenger Six LED, scrolling visual display units per car. Semi-automatic audio station

Information: announcements. Passenger alarm with talkback to driver.

Doors: Pneumatically operated sliding doors. Two double and one single per side (driving

motor cars), two double and two single per side (trailer and UNDM cars.

Train Protection Tripcocks/train stops/deadman's handle.

1973 Tube Stocks

Piccadilly line



Built by Metro-Cammell, Birmingham 1974 - 1977 **Entered service Piccadilly line 1975-1978** Refurbished by Bombardier Prorail 1995-2000 Maintained by: London Underground – AP JNP

Principal characteristics

Track gauge: 4ft 8½ ins/1435mm

Current system: 630V dc 3rd and 4th rail, floating earth

Driving Motor (DM); Trailer (T); Uncoupling Non-Driving Motor (UNDM), Double Types of vehicle:

End Driving Motor (DM*), Special Trailer (T*).

Formation per unit: Three cars, formed $DM - T - UNDM (152 \text{ units}) \text{ or } DM^* - T^* - DM^* (21 \text{ units})$

Formation per train: Six cars, formed DM - T - UNDM + UNDM - T - DM

> $DM^* - T^* - DM^* + UNDM - T - DM$ DM - T - UNDM + DM* - T - DM*

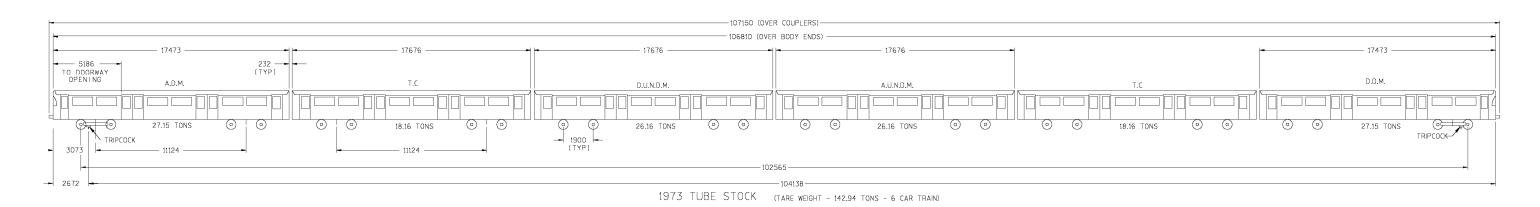
DM* - T - DM* + DM* - T - DM*

86.5 six-car trains. Number of train:

Operation: Conventional O.P.O. driving with doors operated by train operator in leading cab.



Information sheet: 4th Edition



Vehicle details and statistics			
	Driving Motor Car	Trailer Car	UNDM
Length over body ends:	17473mm	17676mm	17676mm
Width of body:	2629mm	2629mm	2629mm
Car height:	2888mm	2888mm	2888mm
Tare weight	29.76 tonnes	20.18 tonnes	28.53 tonnes
Double-Ender	30.22 tonnes	20.93 tonnes	-
Tare weight of 6-car train:	156.93 – 159.84 tonnes (dependent on formation)		
Passenger door open width : (double) :	1370mm	1370mm	1370mm
Passenger door open width : (single) :	685mm	685mm	685mm
Car number series:	100-253	500-696	300-453
Double-Ender	864-897		
Vehicles in stock:	194	173	152
Grand total in stock		519	

Passenger accommodation:

Please note that standing capacity figures exclude seating capacity

Seating capacity: (Number of seats per train)	228
Standing capacities: Floor area available for standing passengers (m²)a	114
Maximum observed standing capacity (5 customers per m²)	570
Maximum full load standing capacity (6 customers per m²)b	684
Theoretical crush standing capacity (7 customers per m²)c	798

NOTES:

- a) Capacities here are figures **calculated** from floor area for design purposes
- b) For propulsion performance rating
- c) For structural and braking capacity

